CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. 98-701

CLEANUP AND ABATEMENT ORDER

FOR

U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE SHASTA-TRINITY NATIONAL FOREST GOLINSKY MINE SHASTA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

- 1. The U.S. Department of Agriculture, Forest Service (Forest Service) administers land comprising the Golinsky Mine, an abandoned copper mine on Little Backbone Creek, tributary to Lake Shasta. The mine is in Sections 28 and 33, T34N, R5W, MDB&M. Past owners/operators of the mine include American Smelters Securities Company (American Smelters) and Backbone Gold Mining Company (Backbone Gold). The corporate successor to American Smelters is ASARCO Incorporated (ASARCO). Backbone Gold is believed to have forfeited its corporate status in 1939. The United States acquired the land on which the mine is located in 1944. The land is currently administered by the Forest Service. The U.S. Department of Agriculture, Forest Service is designated hereafter as Discharger.
- 2. Groundwater and surface water infiltrate into the mine workings through soil and rock. This water contacts sulfide deposits exposed to air in the old tunnel complexes of the mine. The ensuing chemical reaction significantly lowers the pH of the water. As this water moves out of the mine tunnels, its acidic nature leaches metals from the rocks which enter surface water drainage courses. The discharge, referred to as acid mine drainage (AMD), is toxic to fish and other aquatic life.
- 3. The Golinsky Mine discharges AMD from at least two portals, seeps, and waste rock dumps. The discharges from the Golinsky mine and other mines in the drainage including the Mammoth Mine complex, enter Little Backbone Creek which is tributary to Lake Shasta. Other sources of discharges of AMD on the property may include, but are not limited to, unknown seeps, exposed ore and mineral zones, and smelter and mine waste dumps.
- 4. Inspections by staff from 1978 to 1991 have shown pH ranging from 2.8 to 3.5, copper ranging between 8.6 to 17.6 mg/l, zinc ranging between 16.8 to 78 mg/l, and cadmium from 0.18 to 1.5

mg/l in discharges from the portals. Federal effluent limits for copper, zinc and cadmium are 0.3, 1.5, and 0.1 mg/l respectively.

- 5. The designated beneficial uses of Lake Shasta and its tributary, Little Backbone Creek, are domestic, municipal, industrial, and agricultural supply; recreation; esthetic enjoyment; navigation; hydroelectric power generation; and preservation and enhancement of fish, wildlife and other aquatic resources.
- 6. Discharges of AMD from the Golinsky Mine in the Little Backbone Creek drainage have caused or contributed to the elimination of all aquatic life in Little Backbone Creek and may contribute to loss of aquatic life in Lake Shasta. Other mines in the Little Backbone Creek drainage have also caused or contributed to loss of aquatic life in Little Backbone Creek and Lake Shasta. Other mines in the Little Backbone Creek drainage area also subject to orders of the Board to eliminate those discharges.
- 7. As a result of the activities described in Findings 2, 3, 4 and 6 the Discharger has caused or permitted, and continues to cause or permit, waste to be discharged where it has created, and threatens to create a condition of pollution or nuisance in Little Backbone Creek and Lake Shasta.
- 8. If the discharge of AMD is not abated, it will continue to create, or threaten to create a condition of pollution or nuisance due to its toxicity to aquatic life in Little Backbone Creek and Lake Shasta.
- 9. The designated beneficial uses of underlying ground water are municipal, industrial, and agricultural supply.
- 10. The Forest Service has initiated actions to direct response efforts at the site pursuant to its regulatory authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). To date these actions have included performance of a preliminary assessment, a site investigation, a search for potentially responsible parties (PRP) and the issuance of information requests to PRPs. Reports submitted include *Report Of Investigation, Golinsky Mine*, June 1992, *Specifications For Construction Of Concrete Bulkheads In The*

Golinsky Mine, Shasta County, California, February 1993, and Evaluation of Response Actions, Golinsky Mine Site, September 1997.

Under CERCLA, the Forest Service may pursue an action against ASARCO as a PRP and recover costs for response actions and require ASARCO to perform response actions at the site.

11. The issuance of this Order is in accordance with Section 13304(a) of the California Water Code, which states:

"Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In any such suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."

- 12. The issuance of this Order is an enforcement action by a regulatory agency and, as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Section 15231(a)(2), Title 14, California Code of Regulations.
- 13. Any person affected adversely by this action of the Board may petition the State Water Resources Control Board to review the action. The petition must be received by the State Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request.
- 14. The Regional Board will consider modifying or rescinding this Order when the Forest Service issues a decision document under CERCLA or after the effective date of a CERCLA enforcement order, decree, or other agreement with the responsible party, providing the decision,

enforcement order, decree or agreement is acceptable to the Regional Board and complies with Federal and State law.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that U.S. Department of Agriculture, Forest Service; shall comply with the following:

- 1. Cleanup and abate, forthwith, the discharge of AMD from the Golinsky Mine to surface waters.
- 2. Compliance with No. 1 above shall include, but not be limited to, the following measures:
 - a. Establish, by 1 February 1998, a monitoring program to obtain accurate flow measurements of discharges from the portals, waste rock dumps, springs, seeps, and Little Backbone Creek to identify sources and evaluate loading rates of metals which contribute AMD discharges to Little Backbone Creek.
 - b. Submit by **1** August **1998**, accurate topographic base maps of the drainages and Golinsky Mine showing locations of mine portals, underground workings, seeps, waste rock dumps, and naturally occurring outcrops which may be contributing AMD to Little Backbone Creek.
 - c. Submit, by **1 December 1998** a report describing the feasibility of proposed solutions to reduce or prevent discharges of AMD to Little Backbone Creek and Lake Shasta from the Golinsky Mine to attain Federal Effluent Limits established in 40 CFR 440.102 and to prevent discharges which cause or contribute to exceedance of water quality standards in the Water Quality Control Plan, Third Edition, for the Sacramento River Basin and the San Joaquin River Basin. The report shall include, but not be limited to, eliminating or treating the discharge of AMD from the mine workings; removing sources of AMD such as waste rock and tailings; diverting drainages; and developing methodologies to reduce metal loading into Little Backbone Creek and Lake Shasta.
 - d. Commence implementation, by **1 October 1999**, of the selected response actions to achieve compliance the Federal Effluent Limits established in 40 CFR 440.102, and prevent discharges which cause or contribute to exceedences of the Water Quality

- Standards established in the Water Quality Control Plan, Third Edition, for the Sacramento River Basin and the San Joaquin River Basin.
- e. Achieve, by **1 October 2001**, full compliance with the Federal Effluent Limits and Water Quality Standards (referenced in Item d. above) from all discharges from the site.
- 2. The Discharger shall submit to the Board on or before each compliance report date, or semiannually, whichever is more frequent, a report detailing compliance or noncompliance with the specific schedule date and task and the progress in the previous half year. If noncompliance is being reported, the reasons for such noncompliance shall be stated, plus an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Board by letter when it is again in compliance with the time schedule.
- 3. If, for any reason, the Discharger is unable to perform any activity or submit any documentation in compliance with the schedules specified in this Order, the Discharger may request, in writing, an extension of time as specified. The extension request shall include justification for this delay. An extension may be granted for good cause, in which case this Order may be accordingly revised.

by: JAMES C. PEDRI, Assistant Executive Officer

(Date)

GARY M. CARLTON, Executive Officer

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